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U. S. Department of Agriculture - Forest Service  
 CENTRAL STATES FOREST EXPERIMENT STATION  
 In Cooperation With  
 Ohio Agricultural Experiment Station  
 OHIO DIVISION OF FORESTRY

Technical Note 37.

October 1, 1941.

VOLUME TABLE 1/  
 for  
BLACK GUM or BLACK TUPELO (Nyssa sylvatica)  
 Holmes County, Ohio

Merchantable Stem to a Variable Top Diameter							INTERNATIONAL Rule ( $\frac{1}{4}$ " Kerf)	
Diameter breast high outside bark (inches)	Gross volume of stem in 12.3-foot logs to merchantable height						Top d.i.b. at merchantable limit	Basis in trees
	1 log	2 logs	3 logs	4 logs	5 logs	6 logs		
Bd.ft.	Bd.ft.	Bd.ft.	Bd.ft.	Bd.ft.	Bd.ft.	Bd.ft.	Inches	Number
7	9	15					6.1	-
8	13	21	27				6.3	4
9	18	28	37				6.5	4
10	23	37	48	59			6.7	4
11	29	47	62	75			6.9	7
12	37	59	77	93			7.1	4
13	72		94	115			7.3	4
14	87		114	139			7.6	2
15	104		136	166	192		7.9	6
16	123		161	195	227		8.1	5
17	143		188	228	265		8.5	3
18	166		218	264	307		8.9	4
19			250	303	352		9.3	4
20			285	346	402		9.8	4
21		323	392	455	514		10.4	3
22		364	442	513	580		11.0	4
23		408	495	575	649		11.6	4
24		455	552	641	724		12.2	1
25		505	613	711	804		12.9	5
26		559	678	787	889		13.6	2
27			746	867	980		14.4	1
28			819	952	1075		15.1	1
29			896	1041	1176		15.9	1
30			978	1135	1283		16.7	1
31				1235			17.4	-
Basis in trees-- number	5	7	26	19	19	3	-	78

1/ Trees climbed and measured by personnel of Work Projects Administration Official Project 65-1-42-166 - "the Ohio Woodland Survey." Measurements taken at 12-foot log lengths above a 1.0-foot stump height. Scaled as 12-foot logs, and additional shorter top logs; top sections less than 8 feet in length scaled as fractions of an 8-foot log. Table prepared in 1941 by the equation method. Multiple correlation coefficient (R) was .991. Standard error of estimate is approximately 17% of estimated volumes. Block shows limits of basic data.

The total estimated gross volume of single black gum trees or stands should be corrected for cull (including defect, sweep, crook, shake, etc.) by a percentage reduction. This percentage should be determined locally through observing the elements comprising cull combined with local experience of millmen as regards losses from rot, shake, etc., in utilizing this species.

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